

### **Energy Storage Solution**

## **Power Conditioning System / PCS125HV**

- 125 kW power capacity with 480 Vac
- Scalable system configuration and integration with mainstream battery systems
- Support both grid-tied and power backup operation









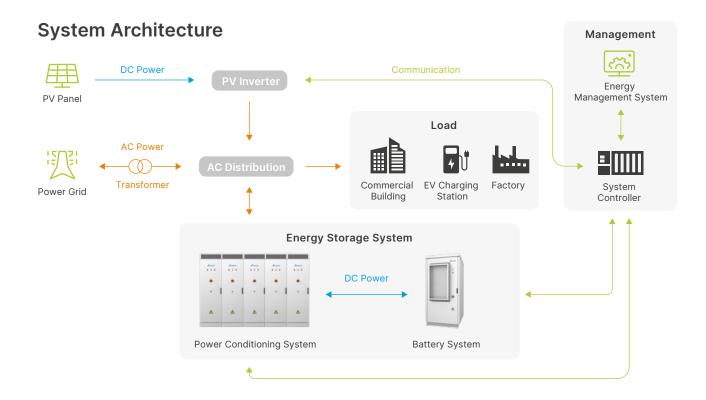


# The Leading Power for Energy Storage

Delta Power Conditioning System (PCS) is a bi-directional energy storage inverter for grid-tied and off-grid applications including power backup, peak shaving, load shifting, PV self-consumption, PV smoothing and etc. It demonstrates industry leading power performance with

high power efficiency and low stand-by power loss. It is compact for space saving and offers scalability for various system configurations and integration with mainstream branded battery systems.





#### **Features**



# Efficient and Precise Power Control

Power capacity: 125 kWAC voltage: 480 Vac

• Peak efficiency: >98%

High power density: 208 W/l, 543 W/kgQuick power response time: <20 ms</li>



# Flexible System Configuration

- Scalable configuration with multiple units
- Support for 3-phase, 4-wire load without transformer



### Designed for Energy Storage Applications

- Real / reactive power compensation to improve power quality
- Peak shaving / demand charge management
- Load shifting for time-of-use savings
- Black start capability for power backup and microgrid applications
- Both grid-tied mode and power backup mode operation



#### **Product at a Glance**





### **Specifications**

Model Name	PCS125HV
AC Connection	
Rated Grid Voltage	480 Vac (3P-N-PE or 3P-PE)
Grid Voltage Range	422 to 528 Vac
Rated Grid Frequency	60 Hz
Rated AC Power	125 kVA / kW
Rated AC Current	151 A
Current THD	< 3%
DC current injection	< 0.5% rated current
Power Factor	-1 to 1, continuously adjustable
DC Connection	
DC Voltage Range	750 to 1350 Vdc for 3P3W / 800 to 1350 Vdc for 3P4W in off-grid mode
DC Voltage Range (Full load)	815 to 1,250 Vdc
Rated Discharge / Charge Power	128 kW / 122 kW
Max. Discharge / Charge Current	157 A / 151A
Standalone Operation	
Rated Output Voltage	480 Vac (3P-N-PE or 3P-PE)
Rated Output Power	125 kVA / kW with linear load
	100 kVA / kW with non-linear load <sup>1)</sup>
Rated Output Current	151 A
Overload Capacity	110% for 30 mins
Output Voltage THD	< 3% @ linear load
Performance	
Peak Efficiency	> 98%
Standby Loss	< 25W @ cold mode
Environment	
Max. Altitude	4,000 m, de-rating >2000m
Operating Temperature	-30 ~ 60 °C, de-rating > 45°C
Humidity	0 to 95% RH, non-condensing
Acoustic Noise	Maximum < 70 dBA @ 1 m
Cooling	Forced air with speed control
Enclosure Rating	Type 3R / IP55
General	
User Interface	LED, EPO, Ethernet
Communication	Ethernet/Modbus TCP
Dimension (W x H x D)	600 × 2000 × 500 mm
Net Weight	230 kg
Certificate	UL1741, UL 1741 SB, IEEE1547 : 2018, FCC part 15 class A
Protection	DC reverse protection/OVP/UVP/OCP/DC insulation detection

- 1) Transformer or motor load or rectifier load, which has large inrush current (lpk>240A) is not included
- 2) The enclosure is classified under the C5-Medium corrosivity category according to ISO 12944-2 standards. Ensure proper installation by following the guidelines of the installation manual for optimal performance.



#### Delta Electronics (Americas), Ltd.

46101 Fremont Blvd, Fremont, CA 94538, U.S.A. Sales: (510) -668-5118 / Support: (877) 442-4732 PCS@deltaww.com

